11
~~12~~. The method according to claim 10, further comprising adding synthetic silica to the mass at a rate substantially similar to that at which the ingot is withdrawn.

12
~~13~~. The method according to claim 1, further comprising the steps of maintaining the melt in a molten state by heating with one or more burners prior to said removing step, wherein in said method at least one burner is a synthesis burner, and the silica is deposited from such synthesis burner(s) in such a manner that synthetic vitreous silica can be deposited at a rate substantially similar to that at which silica is withdrawn as ingot through the shaping orifice.

13
~~14~~. The method according to claim 1, further comprising depositing synthetic silica into the refractory container from a synthesis burner.

14
~~15~~. The method according to claim 12, wherein the synthesis burner heats the surface of the melt so that the deposited silica sinters directly to glass.

15
~~16~~. The method according to claim 13, wherein the synthesis burner heats the surface of the melt so that the deposited silica sinters directly to glass.

16
~~17~~. A furnace for the manufacture of synthetic vitreous silica ingot, the furnace comprising: a furnace enclosure housing a refractory container, the container being adapted to hold a melt of synthetic vitreous silica; a die disposed within a wall or base of the container, the die including an orifice through which the glass ingot is extruded; moveable support means downstream of the orifice, adapted to support and facilitate withdrawal of the ingot; and one or more burners adapted to maintain the silica at or above its sintering temperature, wherein at least one burner is a synthesis burner.

17 16
~~18~~. The furnace according to claim ~~17~~, wherein said burner comprises associated means for the supply of silica precursor and combustion gases and is adapted to deposit synthetic vitreous silica by vapour deposition onto the surface of the melt, wherein said furnace permits continuous withdrawal of silica as ingot at a rate substantially similar to that at which silica is deposited by said synthesis burner.

18 16
~~19~~. The furnace according to claim ~~17~~, wherein the moveable support means comprises an arrangement of moveable clamps.

19 18
~~20~~. The furnace according to claim ~~19~~, wherein the refractory container with its die, the ingot and the arrangement of clamps can be rotated synchronously to provide a deposited glass of improved homogeneity.

20 18
~~21~~. The furnace according to claim ~~19~~, wherein the refractory container with its die, the ingot and the arrangement of clamps can be moved to and fro horizontally to permit spreading of the pattern of deposited glass from the burner.

21 18
~~22~~. The furnace according to claim ~~19~~, wherein the refractory container with its die, the ingot and the arrangement of clamps can be moved in orthogonally disposed x- and y- directions, to permit spreading of the pattern of deposited glass from the one or more burners.

22 18
~~23~~. The furnace according to claim ~~19~~, wherein spreading of the pattern of deposited silica is achieved by movement of the one or more burners and/or of the refractory container.